Claims

1. An optical component for terahertz wave transmission characterized by comprising cycloolefin.

2. An optical component for terahertz wave transmission as claimed in claim 1, characterized in that the optical component is any of a lens, a prism, a beam supplier, a beam splitter, a fiber, a waveguide, a mirror, a polarizer and a window.

3. A terahertz wave optical system characterized by having a terahertz wave generation source, and an optical component comprising cycloolefin arranged on the optical axis of terahertz waves generated from said terahertz generation source.

4. A terahertz wave optical system as claimed in claim 3, characterized by being constructed so that a visible light source is disposed and visible light from said visible light source is superimposed on the optical axis of the terahertz waves.

5. A terahertz wave optical system as claimed in claim 3 or 4, characterized in that a frequency of the terahertz waves is 100 GHz to 10 THz.

6. A terahertz band wave processing apparatus configured to have:

a terahertz wave generator for generating predetermined terahertz waves,

a terahertz wave detector for detecting the terahertz waves,

a first light transmission regulator for defining a light transmission path between the terahertz wave generator and the terahertz wave detector and regulating the optical axis,

a light semi-transmissive plate for transmitting terahertz waves on the optical axis between the first light transmission regulator and the terahertz wave detector, and reflecting light incident at a predetermined incident angle, and

a second light transmission regulator set on the optical axis between the light semi-transmissive plate and the terahertz wave detector, characterized in that

predetermined visible light enters the light semi-transmissive plate as pilot light and is reflected by said light semi-transmissive plate and the optical axis of said reflected visible light is superimposed on the optical axis of the terahertz waves and the optical axis of said terahertz waves can be visually recognized in a simulated manner by the visible light.

7. A terahertz band wave processing apparatus as claimed in claim 6, characterized in that the terahertz wave detector is an Si bolometer.

8. A terahertz band wave processing apparatus as claimed in claim 6 or 7, characterized by further having at least one pilot light guide mirror for use as optical axis

adjustment of the pilot light entering the light semi-transmissive plate.

9. A terahertz band wave processing apparatus as claimed in any of claims 6 to 8, characterized in that a visible light laser is used as the pilot light.

10. A terahertz band wave processing apparatus as claimed in any of claims 6 to 9, characterized in that an aperture is applied to the light transmission regulator and a cycloolefin plate is applied to the light semi-transmissive plate, respectively.

11. A terahertz band wave processing method characterized by processing terahertz band waves using visible light as pilot light.

12. A terahertz band wave processing method configured to have:

a detector position adjustment step of adjusting a direction and a position of a detector for detecting predetermined terahertz waves to a traveling direction of said terahertz waves,

an aperture setting step of setting at least one aperture in a position in which a measured value of the detector does not decrease, and

a pilot optical axis adjustment step of passing predetermined pilot light through the aperture using a pilot light guide mirror and coaxially superimposing the optical axis of said pilot light on the optical axis of the terahertz waves, characterized in that

predetermined visible light is used as pilot light and the optical axis of said visible light is superimposed on the optical axis of the terahertz waves and the optical axis of said terahertz waves can be visually recognized in a simulated manner by the visible light.